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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Pierre Doublet

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03/19/2009

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EXAMINER

DICUS, TAMRA

ART UNIT

PAPER NUMBER

1794

MAIL DATE

DELIVERY MODE

03/19/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/521,555	Applicant(s) DOUBLET, PIERRE	
	Examiner TAMRA L. DICUS	Art Unit 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 11 December 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5-8,11,12,15-17 and 22-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5-8,11,12,15-17 and 22-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The RCE is acknowledged.

The prior 102b (only over claim 6) and 112 rejections are withdrawn due to Applicant's amendments.

NOTE

Claim 15 has a comma and period at the end of the sentence.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 5, 7-8, 11, 15, 17, and 22-27 are rejected under 35 U.S.C. 102 (b) as being anticipated by Zeiter et al. (CA 23335239).

Zeiter teaches a security (page 6, lines 30-31) (counterfeit-proof, equivalent to against copying) having on both sides of a transparent material 10, superimposed, overlapping, and identical images 12 and 14, of patterns of broken lines, in a spatial relationship (because said lines are the same spaced on both sides, they are in series and complementary and considered a volume

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effect), changing also in viewing angle, using a mathematical equation (page 6, lines 5-32, and page 7, 10-32, FIG. 1 and associated text) resulting in a three dimensional moiré effect, observed in reflected, UV, or IR light (see page 4, lines 16-20-claims 22-27). The math equation correlates the angle and distances to no the resolution (printing intensity) of the image, which is very fine. Zeiter explains on page 3, lines 5-20 that that a two-dimensional image moiré effect can use reflecting material (conductive property-and thus because the same black color lines are used, the properties of claims 22-27 are expected to react under the claimed sources of radiation not mentioned by Zeiter, see Applicant's specification on page 4, lines 12-20 only mentioning black or gray color lines reacting under different sources of radiation) to change the angle of reflection and prepares a three dimensional moiré pattern and effects when incorporating trade names and signs (see page 3, lines 18, and 31). Because the same lines and positioning are employed teaching viewing angles, resolution, straight and curved lines, and lightness to darkness effects, Zeiter's teaching embraces a 3D volume effect per claim 1 and varying printing intensity and density of claim 2. See page 3, lines 20—35 and page 7. The language of Zeiter thus addresses the limitations of the instant claims.

Claim Rejections – 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 23-24 or 26-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zeiter et al. (CA 23335239) in view of 5,857,709 to Mallol et al.

The features of Zeiter are relied upon above.

Zeiter, while teaching 3D effects with the same black or hued multicolored printed ink under radiation, does not explicitly recite the radiation source or properties of claims 23-24 or 26-27.

Chock, analogously directed to security documents, teaches it is well known to include a variety of inks (which it is well known that such inks will react under the radiation source it is named after, as the source reaction depends upon the ink material) including magnetic, fluorescent, photochromic and thermochromic dyes/inks to further security. See at least Abstract, col. 1, in particular line 63, col. 3, in particular lines 39, and 45-56.

It would have been obvious to one having ordinary skill in the art to have modified Zeiter to use, include, or substitute the properties or sources as claimed because Chock teaches they add further security as cited above.

Claims 28-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zeiter et al. (CA 23335239) in view of USPG PUB 2001/0018113 to Mallol et al.

The features of Zeiter are relied upon above.

While Zeiter does not expressly state the exact wording where the three-dimensional image is observed in transmitted light, or the three-dimensional image appearance as claimed (claims 28-31); however, Zeiter explains on page 3, lines 5-20 that that a two-dimensional image moiré effect can use reflecting material (conductive property) to change the angle of reflection and prepares a three dimensional moiré pattern and effects when incorporating trade names and signs (see page 3 lines 18, and 31).

Mallol et al., analogously directed, also teach lines from a mask that provides patterns of lines (embraces multiple sets, see [0030-0033, 0045-0046, 0071-0075, 0098, 0104, claims 1-14) in slanting parallel juxtaposition with an image such as a watermark between the lines and when observed in transmitted light, contributes to a multi-tone effect (see also FIGs. 1 and 2 similar to Applicant's drawings).

It would have been obvious to one having ordinary skill in the art to have modified Zeiter because Mallol teaches an arrangement of lines that are similar with the observed multi-tone effect, which appears to the same 3D relief or volume effect as claimed by Applicant to aid in security.

Claims 1-3, 5-8, 11-12, 15-17, and 22-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,449,200 to Andric et al. in view of Zeiter et al. (CA 23335239) and of USPG PUB 2001/0018113 to Mallol et al.

Andric teaches a security paper with a watermark (element) and superimposed, overlapping, and identical indicia on both sides that is observed in reflected light and viewed in transmitted light (18, 20, 22, Fig. 1 and associated text, 12:1-35) on a paper support (10, Fig. 1), where the images are numerals, words, or symbols in any number combination (9:1-10, embraces dots, alternating, varying). Regions 40, 42, 44, 46, 48 (Fig. 1) are transparent (thus including a region of reduced opacity as per instant claim 12). Also Fig. 2 teaches a similar paper, including any pigments to increase opacity. The images are printed using fluorescent or magnetic inks (13:1-15, same material as magnetic so the excitation what happens under excitation sources are inherent properties). The language of Andric thus addresses the limitations of instant Claims 1-3, 5-8, 11-12, 15-17, and 21-27 in part.

Andric does not teach the exact language of indicia are (or when) observed in transmitted light or having the appearance of a three-dimensional image volume or relief effect with varying density (Claims 1-3, 5-8, 11-12, 17 and 28-30).

Zeiter teaches a security (page 6, lines 30-31) (counterfeit-proof, equivalent to against copying) having on both sides of a transparent material 10, superimposed, overlapping, and identical images 12 and 14, of patterns of broken lines, in a spatial relationship (because said lines are the same spaced on both sides, they are in series and complementary), changing also in viewing angle, using a mathematical equation (page 6, lines 5-32, and page 7, 10-32, FIG. 1 and associated text) resulting in a three dimensional moiré effect, observed in reflected light. The math equation correlates the angle and distances to the resolution (printing intensity) of the image, which is very fine. Zeiter teaches moiré images are two-dimensional (page 3, lines 6-10) and result from two overlapping patterns. Because the same lines and positioning are employed teaching viewing angles, resolution, straight and curved lines, and lightness to darkness effects, Zeiter's teaching embraces varying printing intensity and density of claim 2. See page 3, lines 20—35 and page 7.

It would have been obvious to one having ordinary skill in the art to have Modified the teaching of Andric to include or use three dimensional images having varying print density because Zeiter teaches a similar security produces an optical effect as an aid to prevent counterfeiting as cited above.

While Andric and Zeiter do not expressly state the exact wording where the three-dimensional image is a volume or relief effect and observed in transmitted light, or the three-dimensional image appearance as claimed (claims 1 and 28-31); however, Zeiter explains on page 3, lines 5-20 that that a two-dimensional image moiré effect can use reflecting material (conductive property) to change the angle of reflection and prepares a three dimensional moiré pattern and effects when incorporating trade names and signs (see page 3 lines 18, and 31).

Mallol et al., analogously directed, also teach lines from a mask that provides patterns of lines (embraces multiple sets, see [0030-0033, 0045-0046, 0071-0075, 0098, 0104, claims 1-14) in slanting parallel juxtaposition with an image such as a watermark between the lines and when observed in transmitted light, contributes to a multi-tone effect (see also FIGs. 1 and 2 similar to Applicant's drawings).

It would have been obvious to one having ordinary skill in the art to have modified Zeiter because Mallol teaches an arrangement of lines that are similar with the observed multi-tone effect, which appears to the same 3D relief or volume effect as claimed by Applicant to aid in security. Further note: Though we are fully cognizant of the hindsight bias that often plagues determinations of obviousness, Graham v. John Deere Co., 383 U.S. 1, 36 (1966), we are also mindful that "the combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable

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results,” KSR Int’l Co. v. Teleflex Inc., 127 S. Ct. 1727, 1739 (2007). Since the lines are similarly arranged, have a multi-tone effect, made with a mask, it would have been obvious to recognize the similarities, resulting in a 3D relief or volume effect and in view of the combination, vary the lines from both sides because Andric teaches them on both sides and thus in combination the invention is envisaged.

Claims 12 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,449,200 to Andric et al. in view of Zeiter et al. (CA 23335239) and further in view of USPG PUB 2001/0018113 to Mallol et al., as applied to claim 1 above, and in view of Doublet et al.

Zeiter essentially teaches the claimed invention above.

Zeiter does not expressly teach a paper support, while using cardboard-type supports (per instant claims 12 and 16).

Doublet teaches a paper having print on it having transparent areas to make a sheet very difficult to reproduce with a copier (5:50-68).

It would have been obvious to one having ordinary skill in the art to have modified the Zeiter reference to include or use a reduced opacity paper in regions as claimed because Doublet teaches a paper having print on it having transparent areas to make a sheet very difficult to reproduce with a copier (5:50-68).

Response to Arguments

Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TAMRA L. DICUS whose telephone number is (571)272-1519. The examiner can normally be reached on Monday-Friday, 7:00-4:30 p.m., alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Larry Tarazano can be reached on 571-272-1515. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free)? If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/D. Lawrence Tarazano/
Supervisory Patent Examiner, Art Unit 1794

Tamra L. Dicus /TLD/
Examiner
Art Unit 1794

March 10, 2009